determined by Mr. Dresser as variations depending on age, are merely individual variations of the young birds. His determination is still more surprising, because he had an opportunity of examining the series of Labrador Jerfalcons in the Brunswick Museum, and evidently did not notice the specimens in moult, as we do not find anything about them in his article.

The other adult specimen of the Labrador Jerfalcon which we know of (from Newfoundland) is now in the Brussels Museum. It is just like the bird in the British Museum described above, but not so bright. We take this opportunity of thanking M. Dubois for sending us a water-colour drawing and a description of this specimen.

Perhaps it may be of interest to add that Joseph Wolf, who made the first figure of the female Labrador Jerfalcon for Mr. Dresser, did not believe that the original of his picture was an adult bird (see Palmer's 'Life of Wolf,' p. 272).

XXIII.—*Notes on the Breeding of Ross's Snow-Goose in Captivity.* By F. E. Blaauw.

At a meeting of the British Ornithologists' Club on March 20th, 1901 (see Bull. B. O. C. xi. p. 55), I exhibited an egg of the rare Ross's Snow-Goose (*Chen rossi*) laid in captivity by a solitary female kept by me at Gooilust. A year later, through the courtesy of Dr. Heck of Berlin, I received a second specimen of this species, which fortunately proved, as I hoped it would, to be a male. The birds soon paired, and in the beginning of May 1902 the female made a nest under a bush in her enclosure. The nest was, as is usual with Geese, a small depression in the soil, lined with dry grass and grass-roots.

Towards the end of the month the female began to lay, and on the 30th, when the full complement of five eggs had been deposited, she began to sit, having in the meantime abundantly lined her nest with down from her own breast.

The two birds had always been of a very retiring dis-

position, but after the female had laid her eggs the male, who nearly always kept watch close by the nest, became quite aggressive. He would fearlessly attack anybody that approached.

So far everything had gone as is usual with Geese, but on the 21st of June, in the morning—that is, after 21 days' incubation,—I was much astonished to find that the young had already been hatched.

Although I had bred Geese of very different sizes, from the large *Chloephaga magellanica* to the small *Bernicla jubata*, and of very different genera, I had never experienced a shorter time than 28 days as the term of incubation. Probably *Chen rossi* breeds very far up in the north, where the summers are short and the vegetation short-lived, so that the whole process of propagation of the species has only a restricted time for completion. This may explain why this species has the advantage of a week over the other kinds of Geese.

To return to this particular brood. All the five eggs had hatched, and the little birds were still in the nest when I noticed them, forming a most charming group, ever watched as they were by their anxious parents.

The chicks are of a yellowish grey, darker on the upper-side and lighter below, and have, what makes them most conspicuously beautiful, bright canary-yellow heads, with the most delicate greyish sheen over them, caused by the extremity of the longer down-hairs being of that colour. The bill is black, with a flesh-coloured tip. A little spot in front of each eye is also blackish. The legs are olive-green. The down is wonderfully full and heavy, and it seems almost incredible how such large birds can have come out of such small eggs. Three of the chicks were as described above, but two of them had the part *white* which in the others was yellow.

This variation in colour of the chicks is, I may remark, not peculiar to *Chen rossi*, other species of Geese occasionally shewing the same phenomenon. Thus, for example, the chicks of *Chloephaga dispar* and *C. magellanica* also offer two distinct types of coloration, which I find has nothing to do

with the sex of the birds. The parents were extremely anxious about their chicks and terribly restless, and to this, I fear, is to be attributed the fact that I did not succeed in rearing the young.

Although the chicks soon began to feed and grew very rapidly at first, I soon observed that one after the other got something wrong with its breathing-organs, and to my great disappointment they died successively, so that the last was found dead a fortnight after they had been hatched. All that I can add is that, as is usual with chicks, the intensity of the coloration gradually diminished as they got older, and in particular the brightness of the yellow of the head and the depth of the black in front of the eyes slowly diminished, so that even when a week old the delicate glory of it had largely disappeared.

Perhaps next season the chicks (if I get any) will live, so that I may observe what the first plumage is like!

The chick of *Chen rossi* differs from that of *Chen hyperboreus* chiefly in having a shorter and comparatively higher bill and in the want of a blackish stripe over the head, which is present in *C. hyperboreus*. The chick of *C. hyperboreus* is also darker, especially on the back, and of a more olive-green colour, while the down is less dense.

XXIV.—*Notices of recent Ornithological Publications.*

[Continued from p. 132.]

40. *Allen on Species and Subspecies.*

[So-called Species and Subspecies. By J. A. Allen. Reprinted from 'Science,' n. s. xvi. pp. 383–386, 1902.]

Mr. Allen, while viewing with much regret the extremely "fine splitting" into subspecies now so prevalent, contends that the expert, and not the layman, should be judge in such matters; for many forms, perfectly distinct on comparison, cannot well be described in terms that give a true idea of their value. He calls attention to the fact that the A. O. U. constantly refuses to recognise subspecies which are not in a